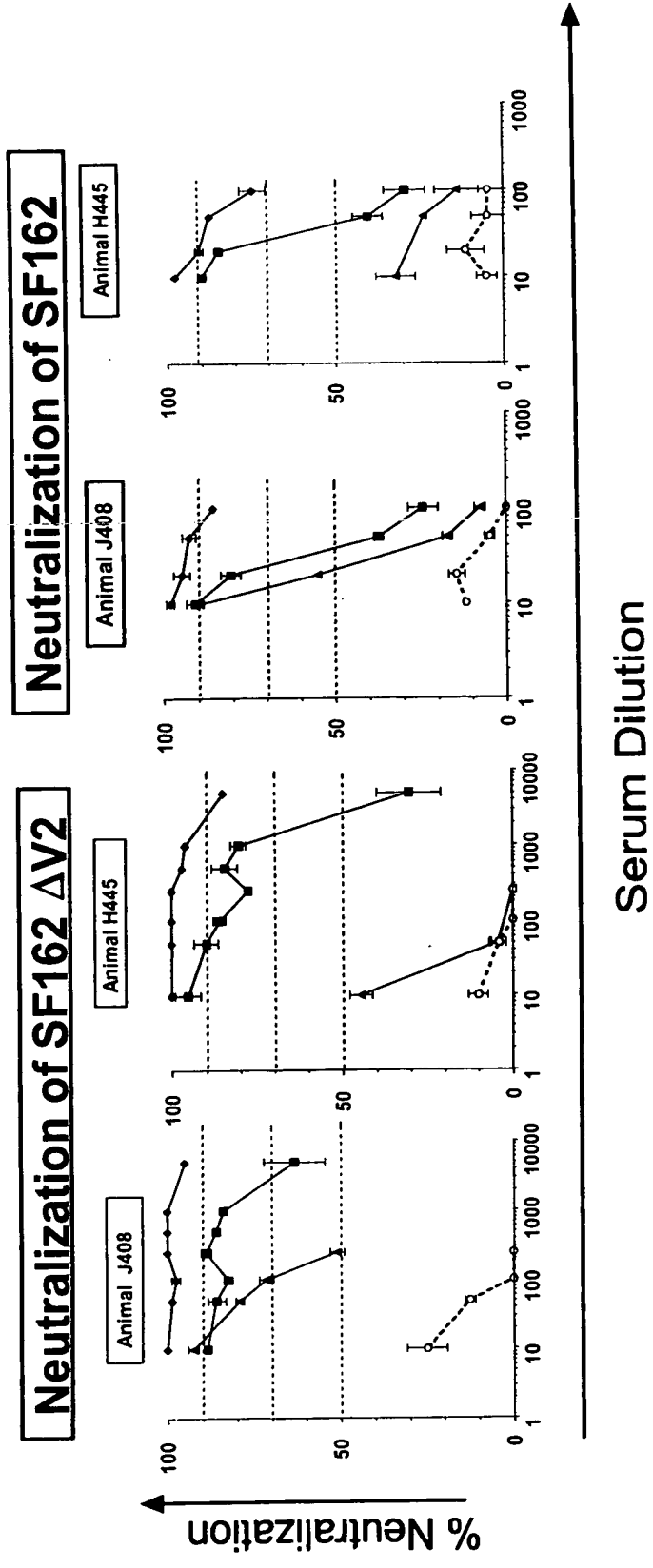
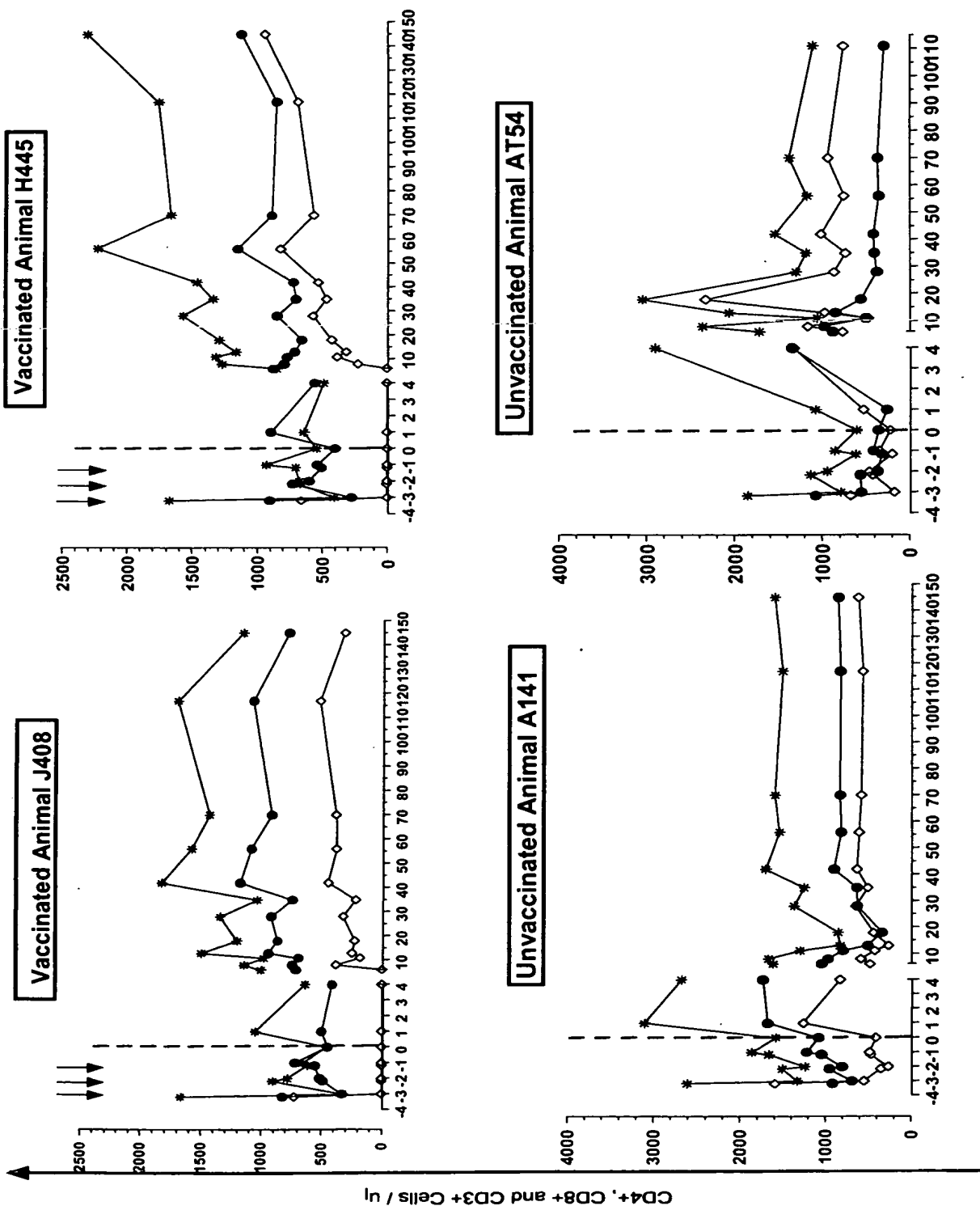


2570-1-001N FIGURE 1



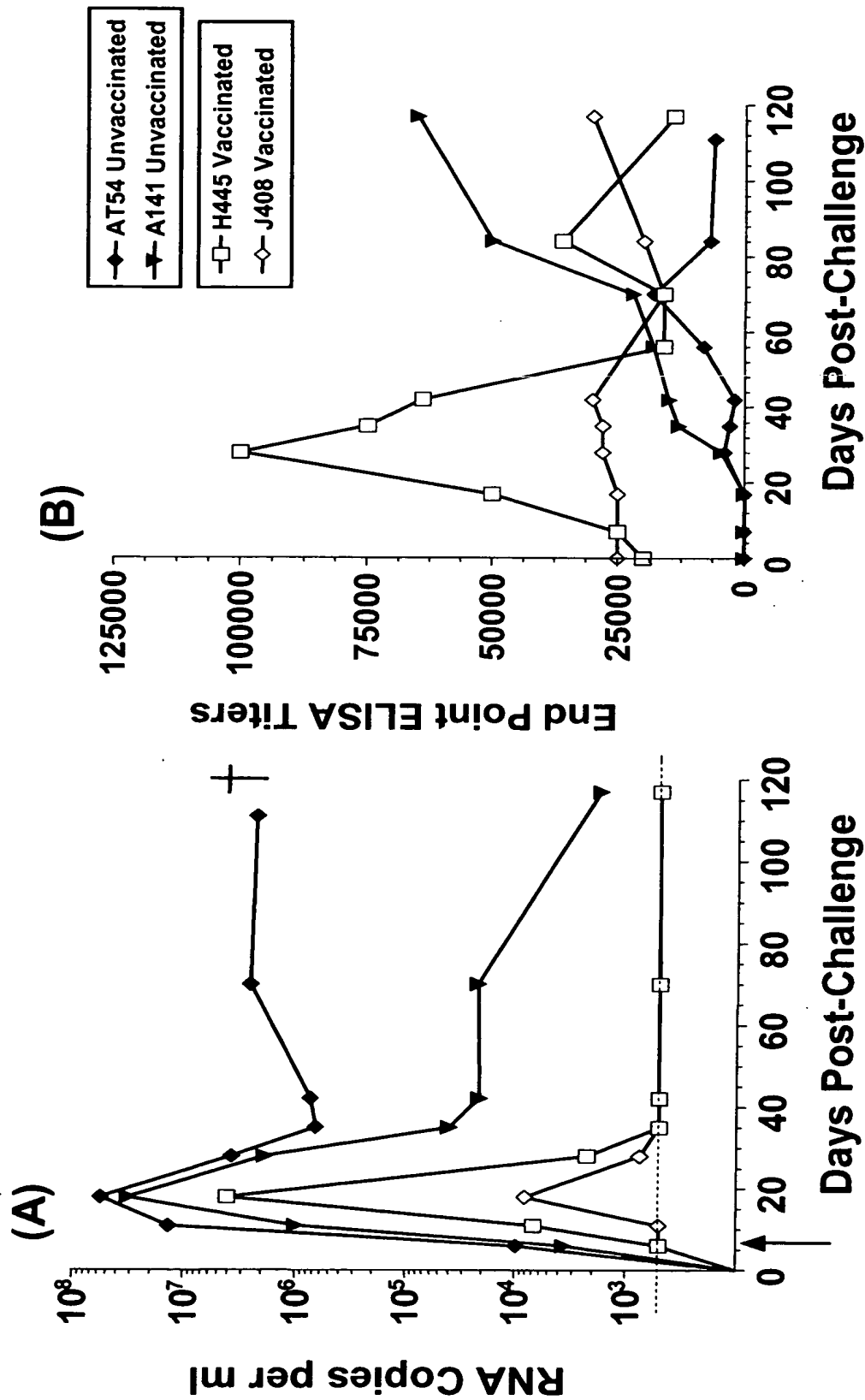
2570-1-001N FIGURE 2

2570-1-001N FIGURE 3

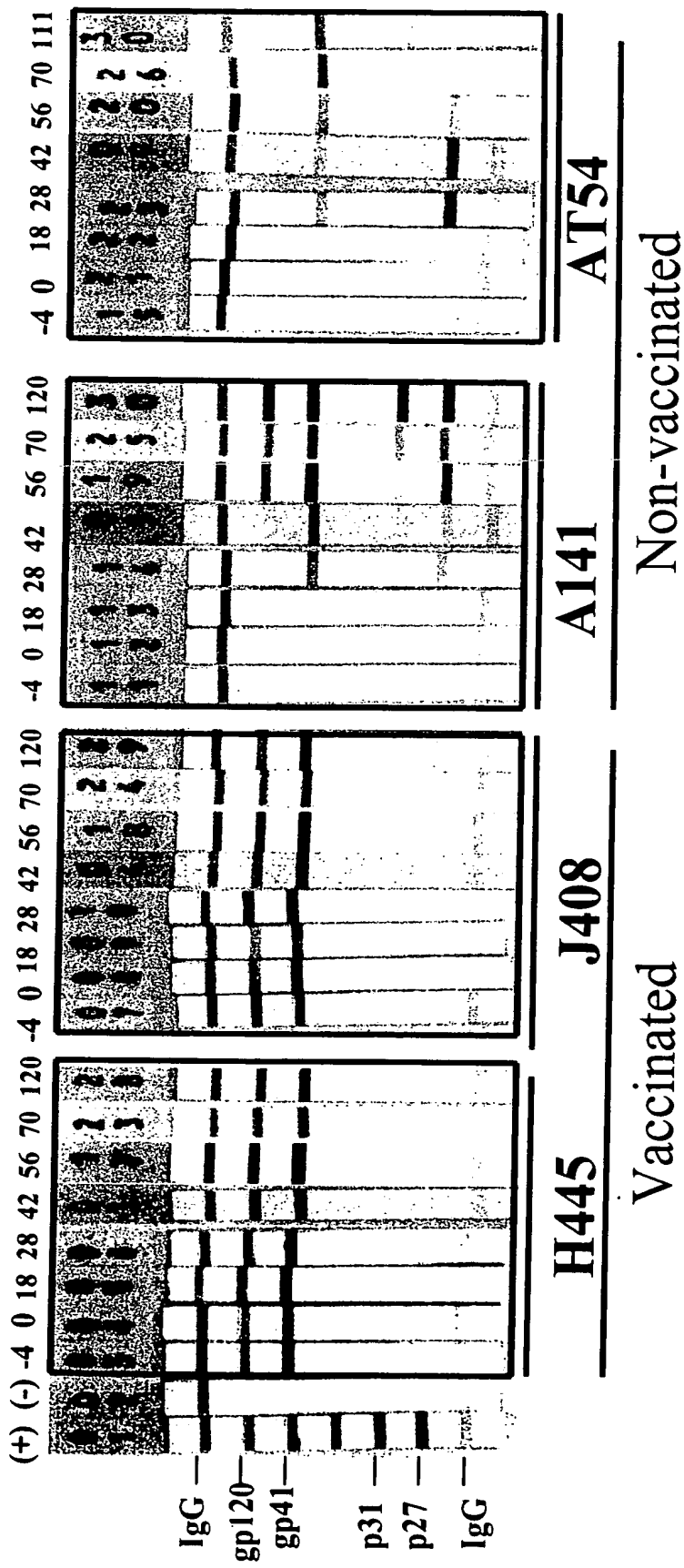


Days Post-Challenge

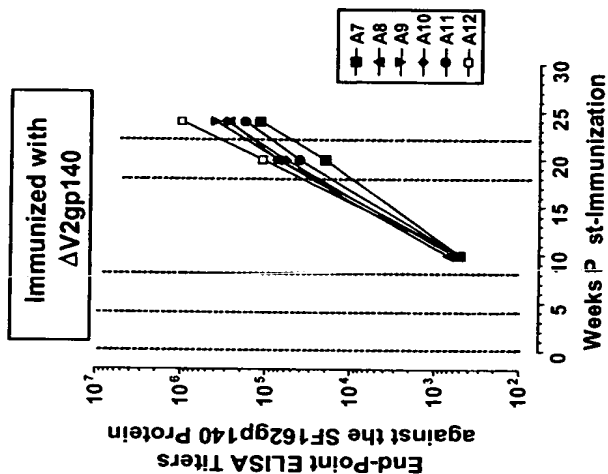
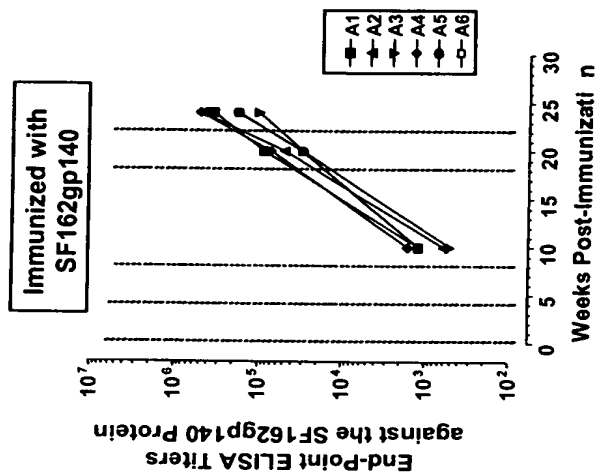
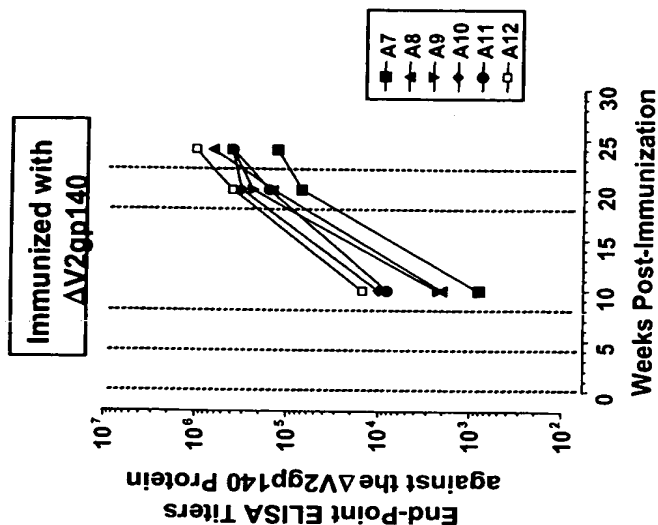
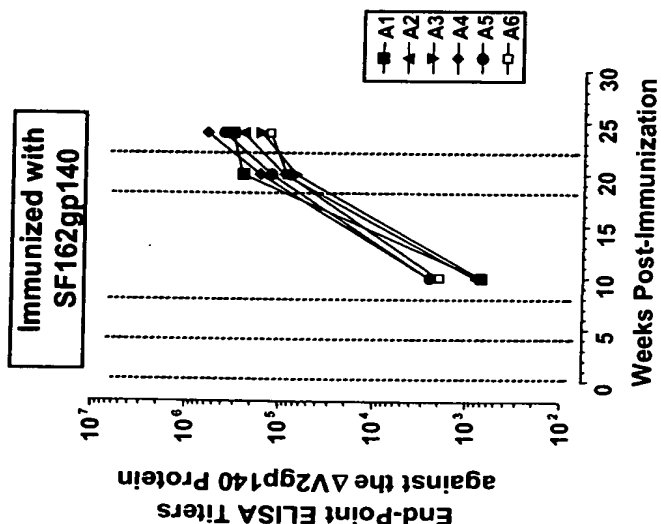
2570-1-001N FIGURE 4



Seroconversion to SIV-gag/pol and HIV env Antigens



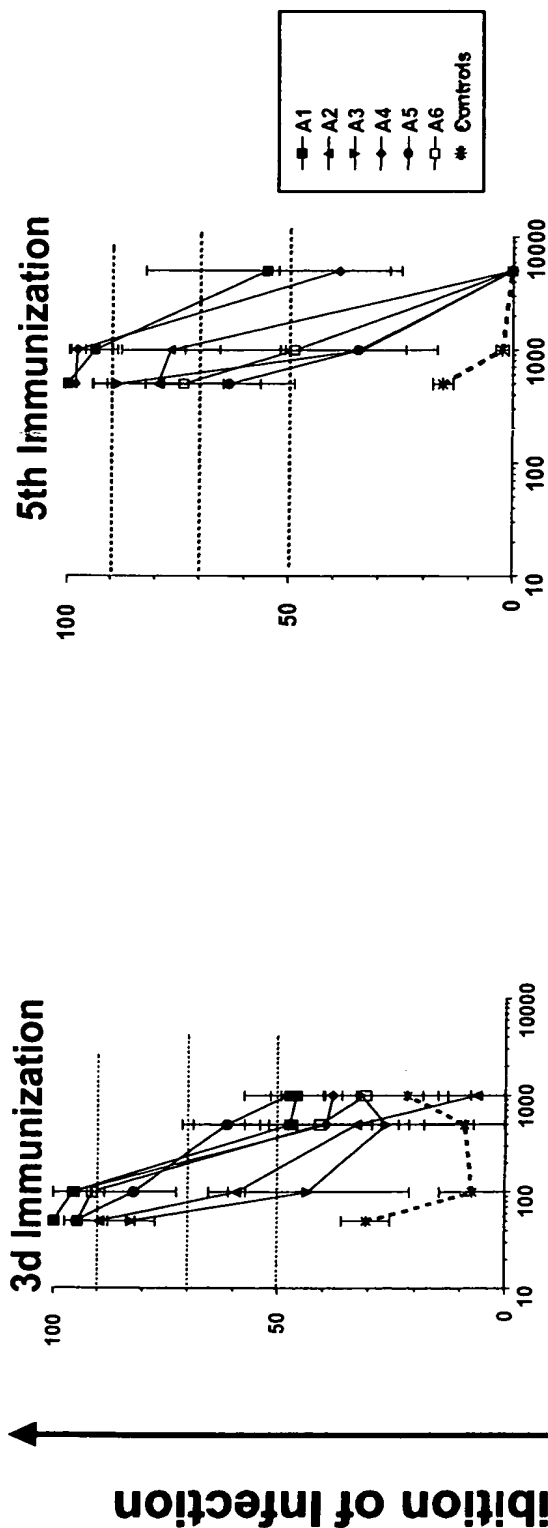
2570-1-001N FIGURE 5



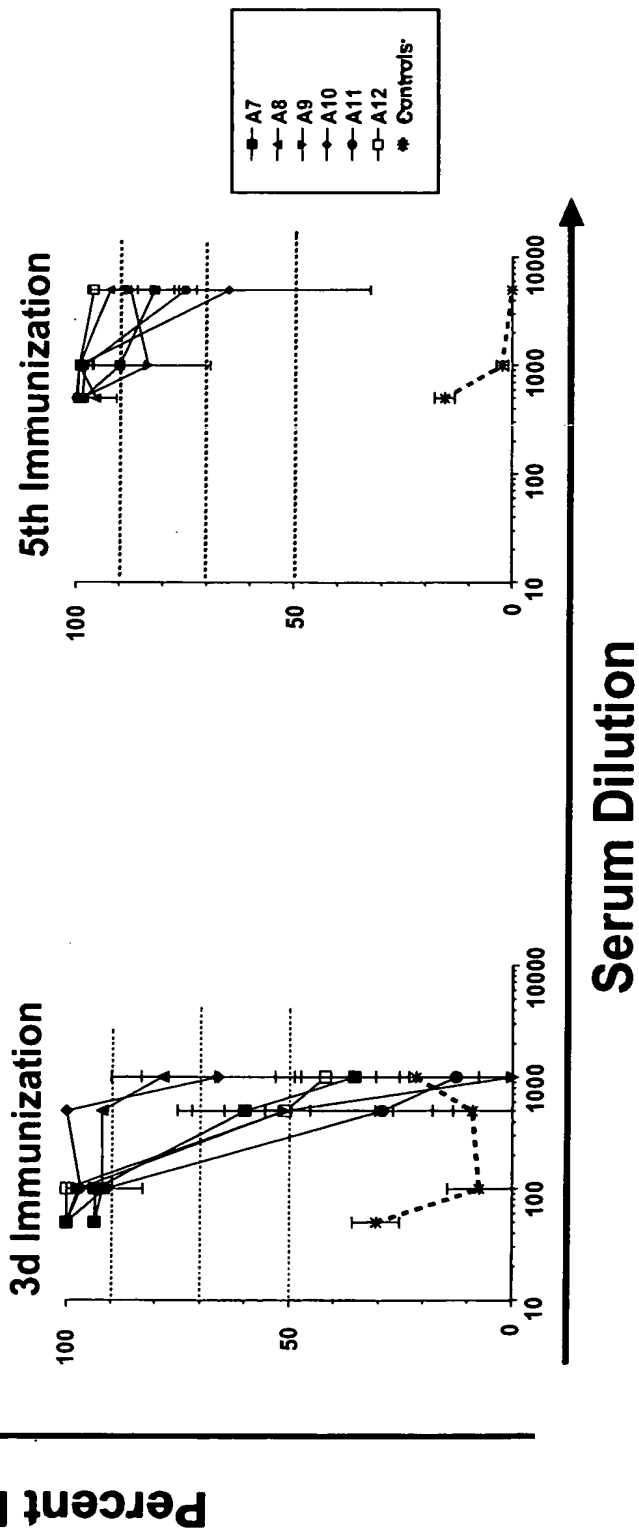
2570-1-001N FIGURE 6

2570-1-001N FIGURE 7a

Animals immunized with SF162gp140

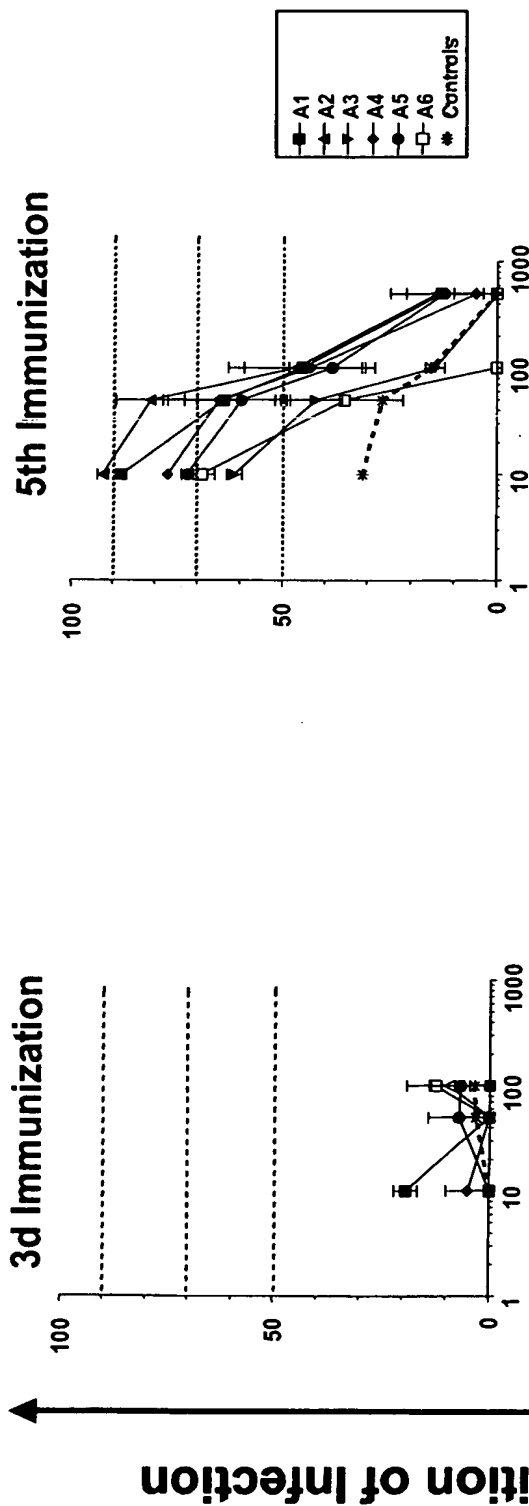


Animals immunized with ΔV2gp140

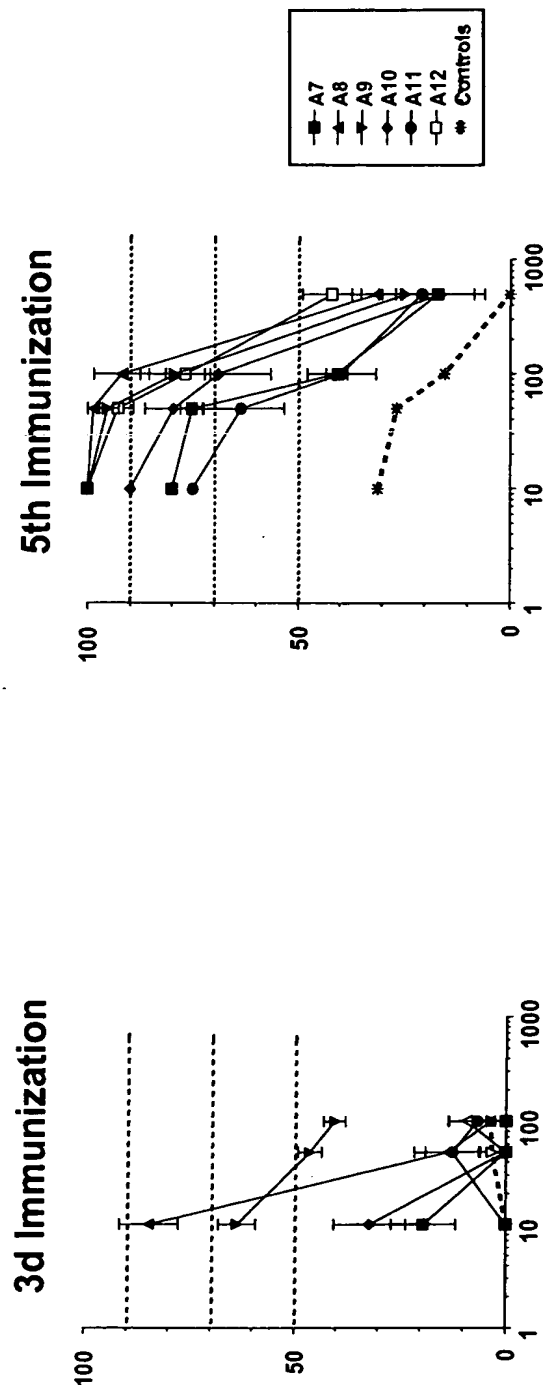


2570-1-001N FIGURE 7B

Animals Immunized with SF162gp140



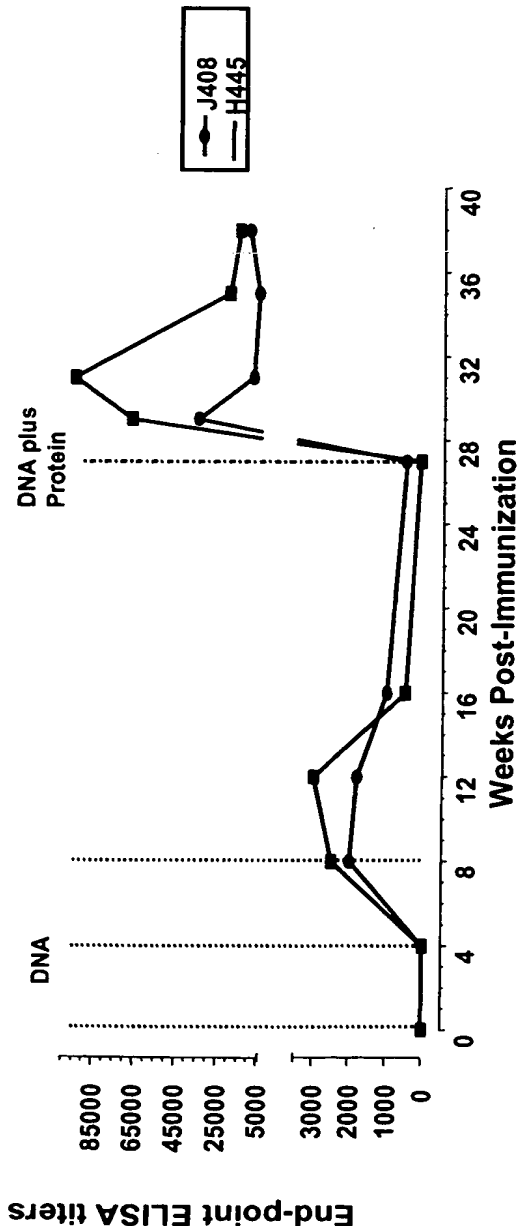
Animals immunized with $\Delta V2gp140$



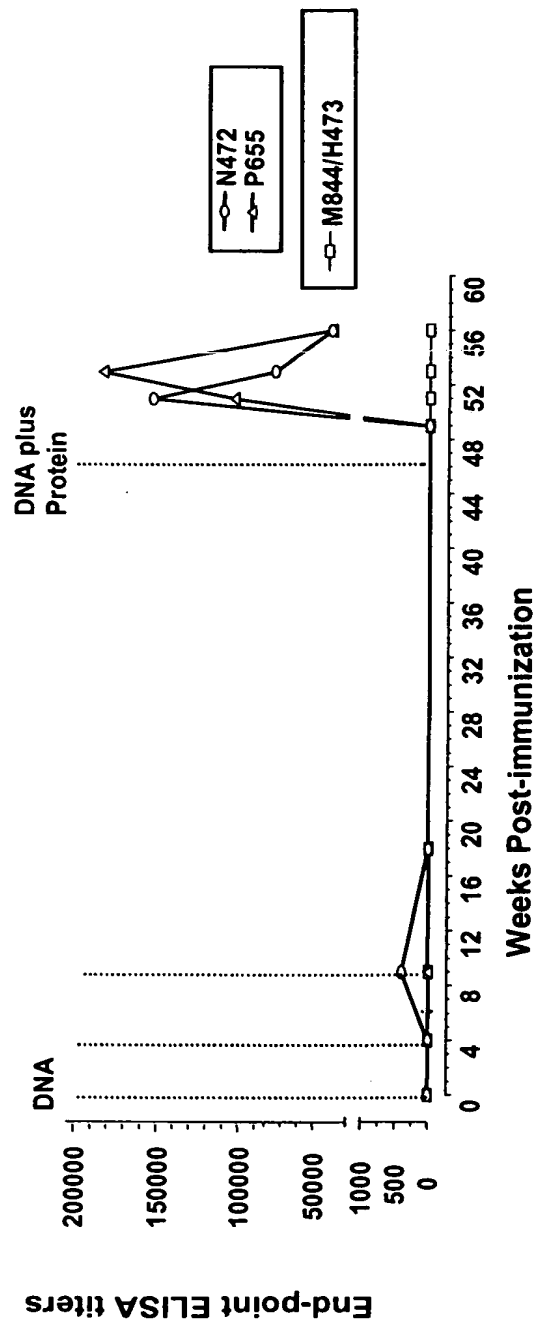
Serum Dilution

2570-1-001N FIGURE 8

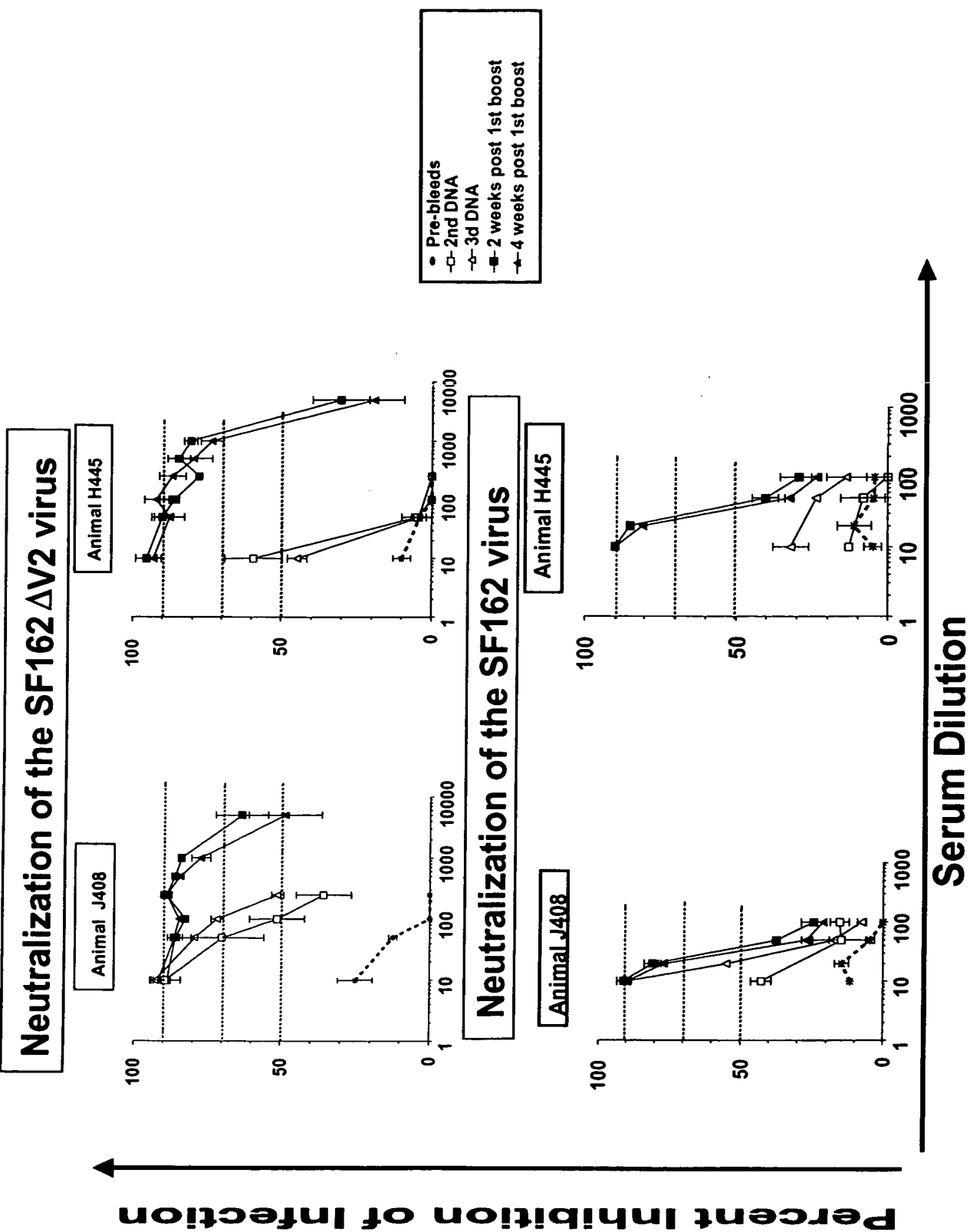
Immunization with the modified Δ V2gp140 immunogen



Immunization with the unmodified SF162gp140 immunogen

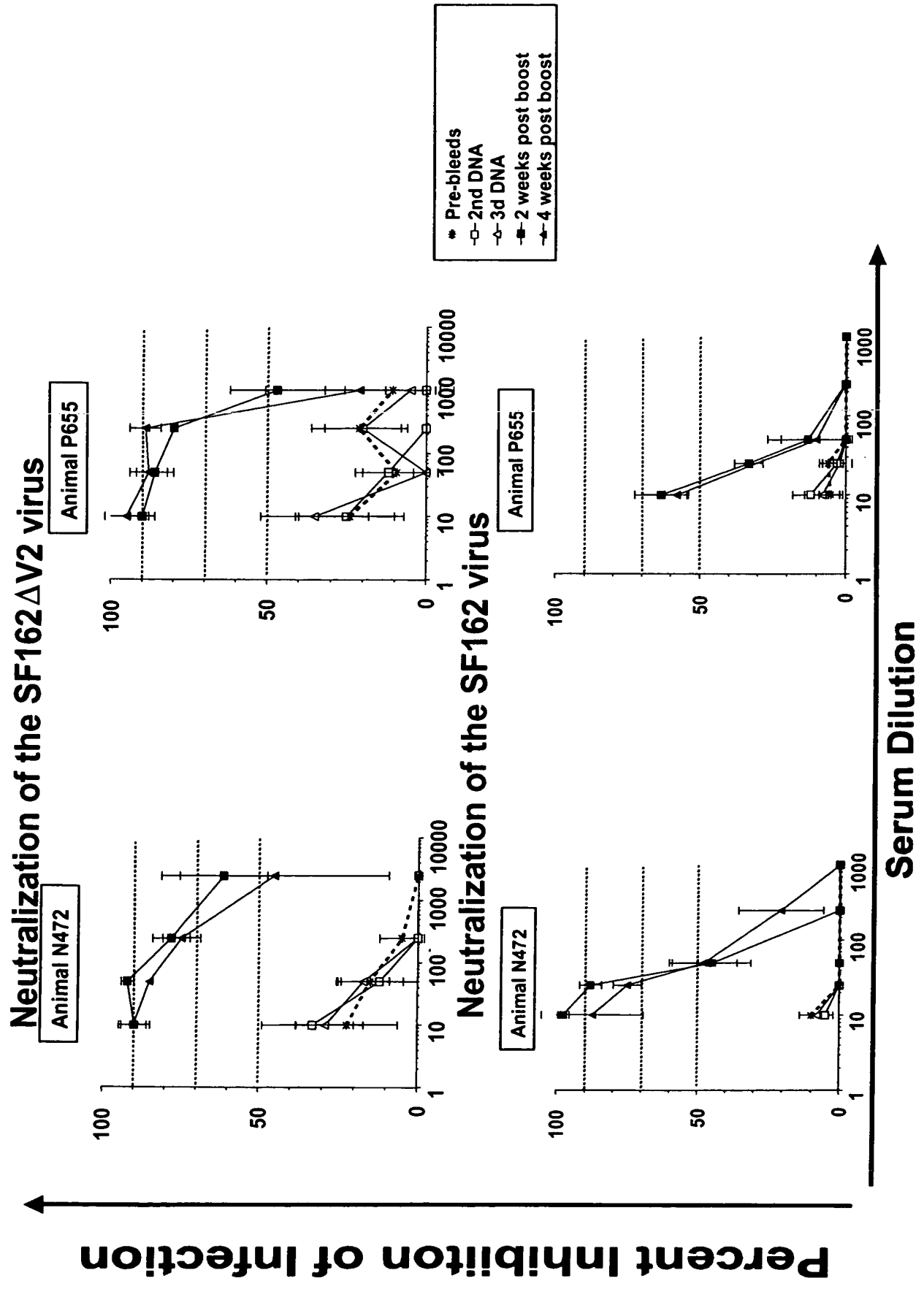


2570-1-001N FIGURE 9A



2570-1-001N FIGURE 9B

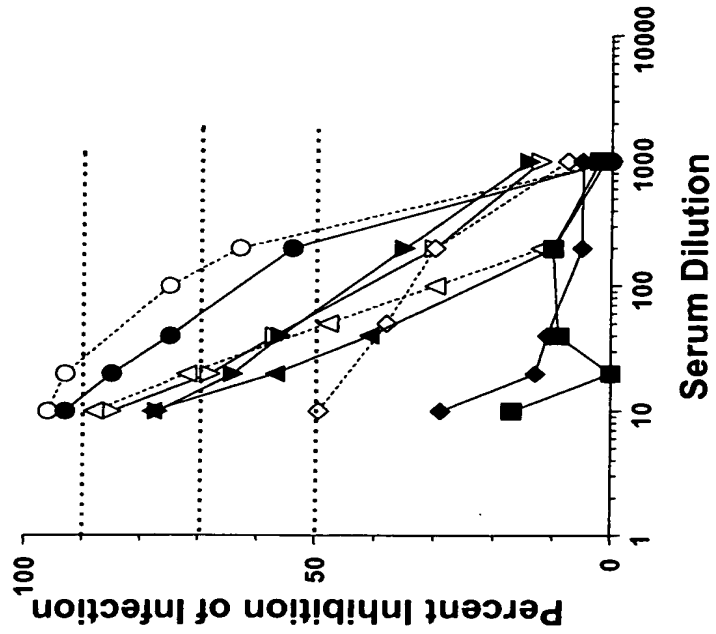
2570-1-001N FIGURE 9B



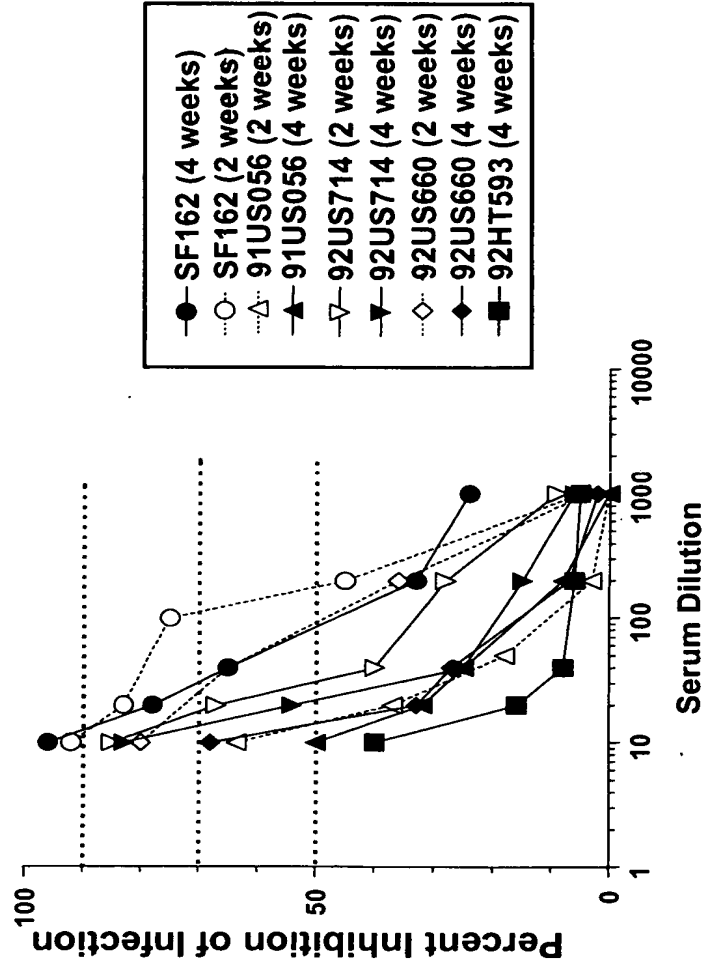
2050E0-60946860

2570-1-001N FIGURE 10

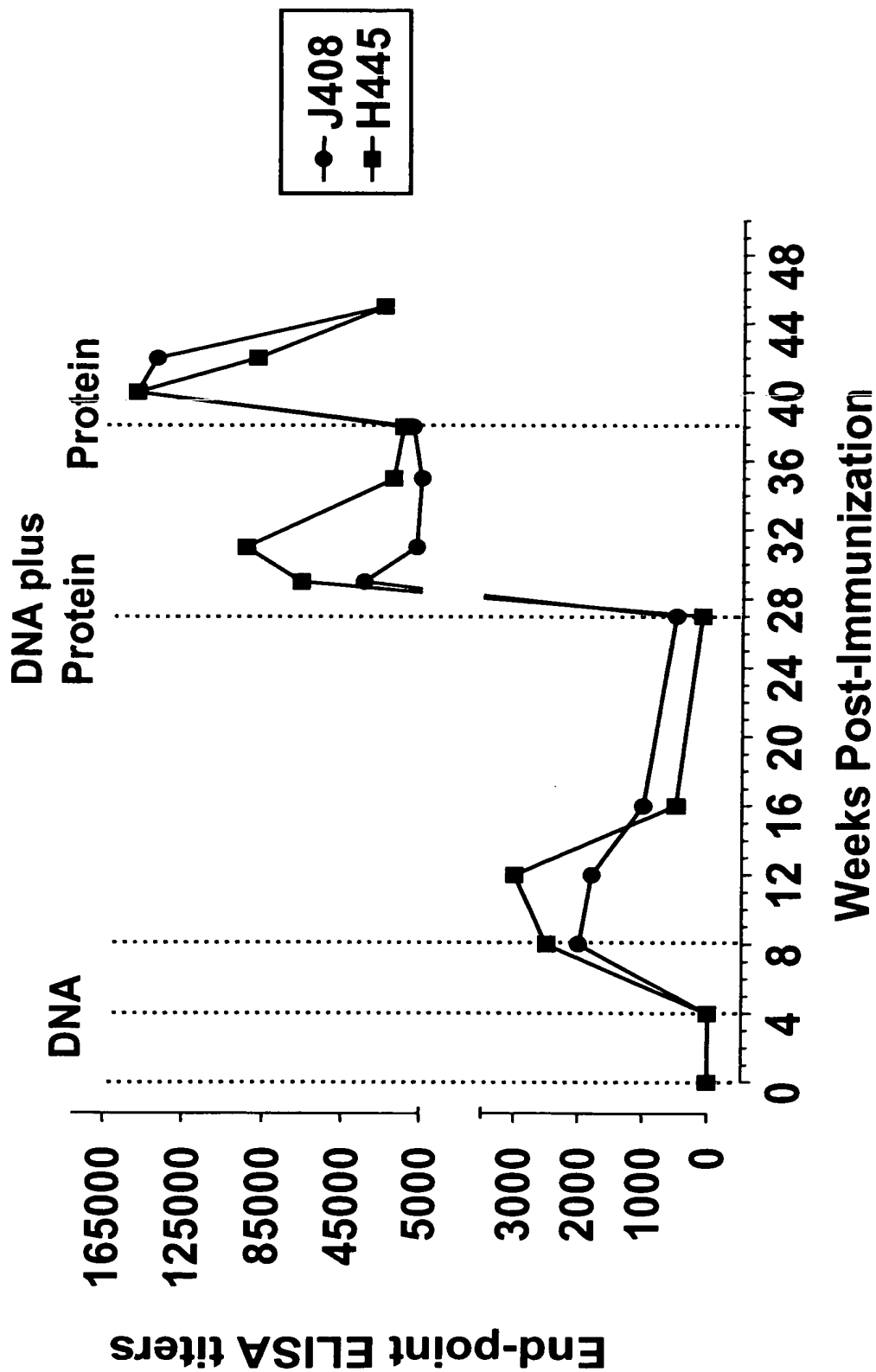
Animal J408



Animal H445

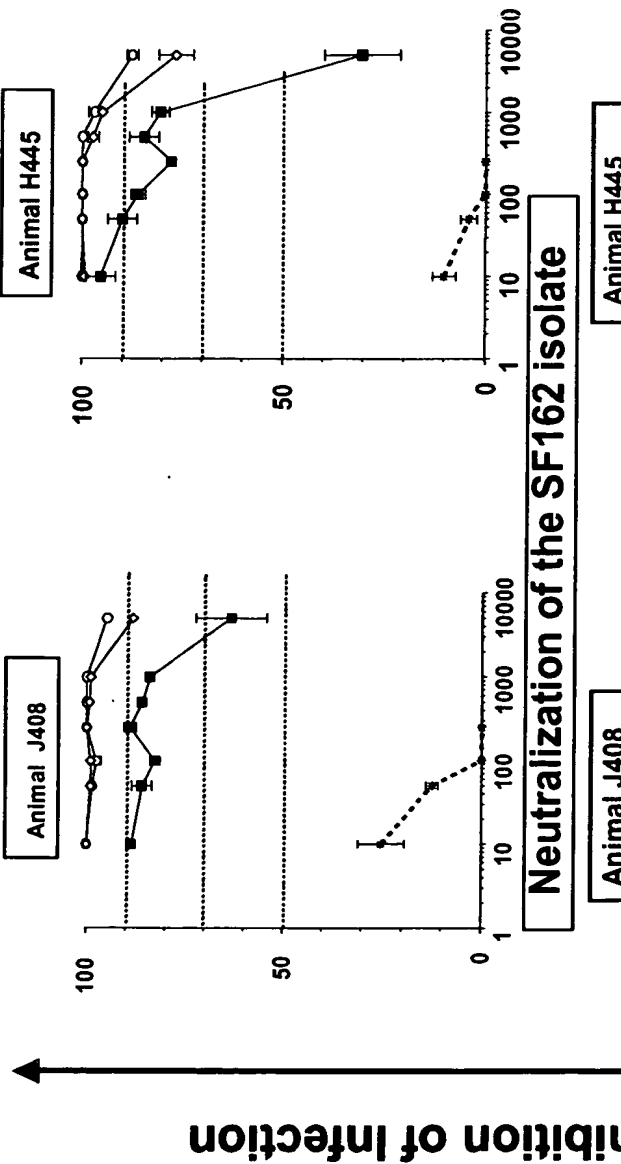


2570-1-001N FIGURE 11A



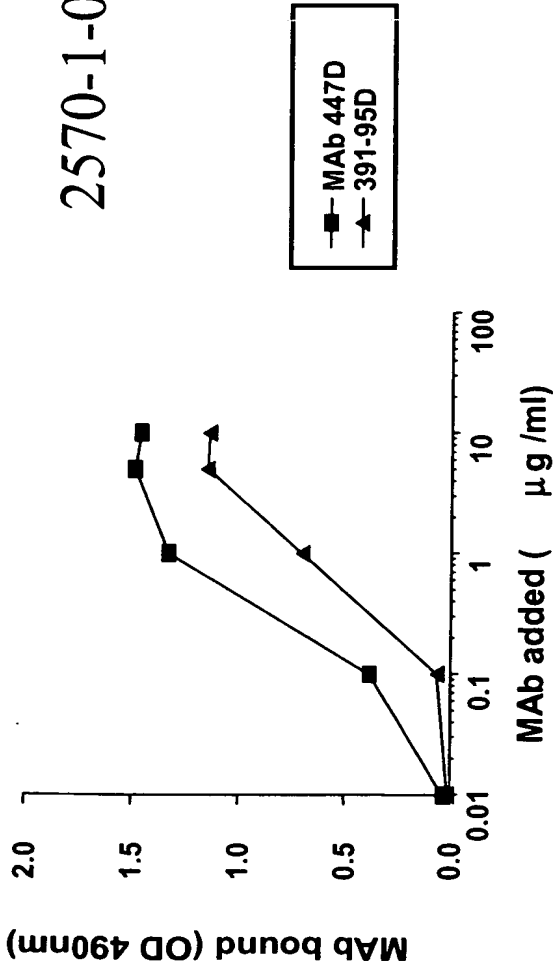
2570-1-001N FIGURE 11B

Neutralization of the SF162ΔV2 isolate

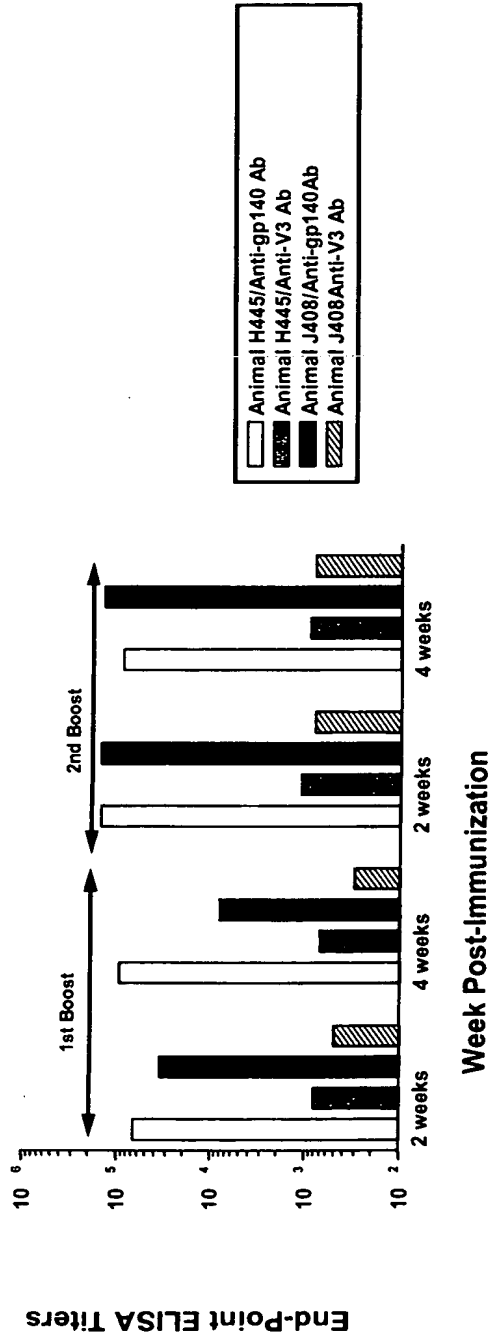


Serum Dilution

(A) Binding of Anti-V3 loop MAbs to the SF162 Δ V2-derived V3 loop peptide

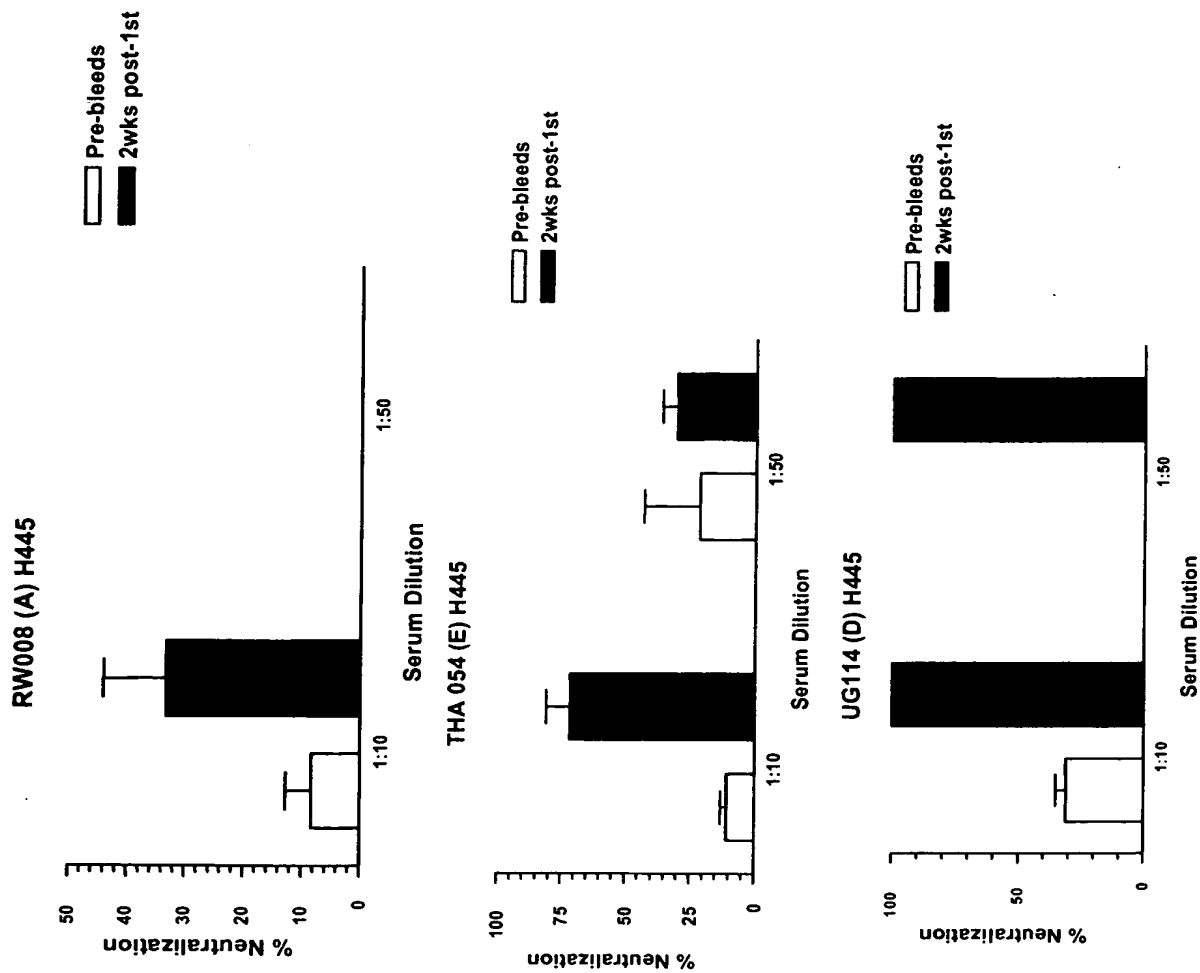


(B) Binding of macaque serum antibodies to the Δ V2gp140 protein and the corresponding V3 loop peptide



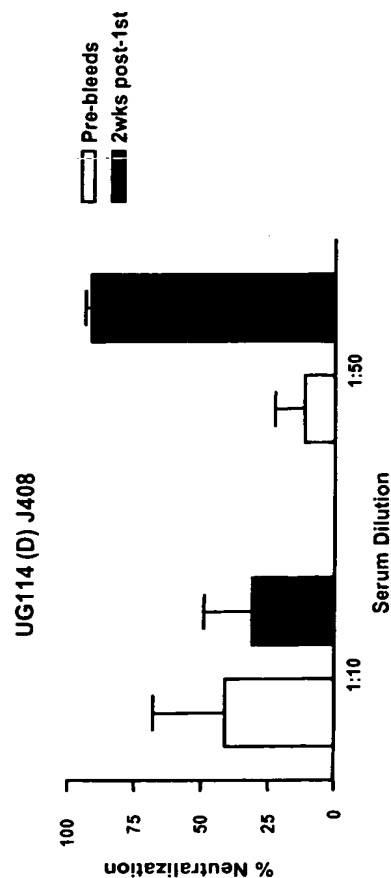
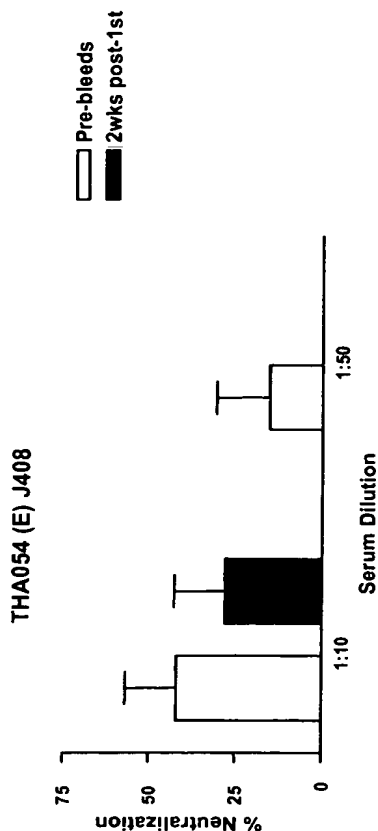
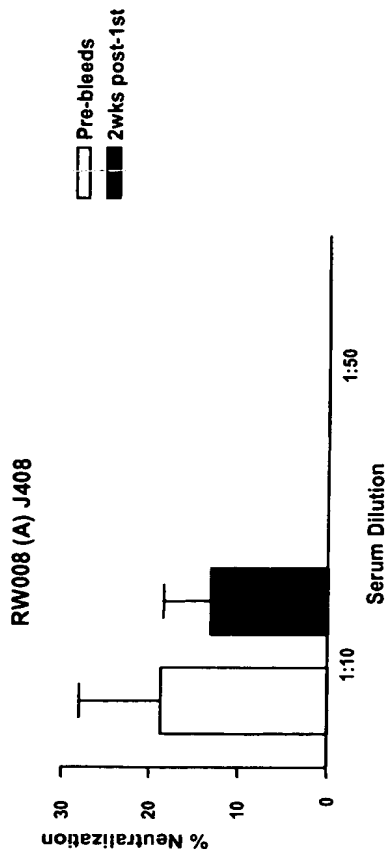
2570-1-001N FIGURE 13A

Neutralization of clade A, E and D HIV-1 viruses from sera collected from animal H445



2570-1-001N FIGURE 13B

Neutralization of clade A, E and D HIV-1 isolates from sera collected from animal J408



2570-1-001N FIGURE 14

atgagagtg aaggggatca ggaagaatta tcagcacttg tggagagggg gcaccttgct
 ccttgggatg ttgatgatct gtatgtctgt agaaaaattg tgggtcacag tctattatgg
 ggtacctgtg tggaaagaag caaccaccac tctattttgt gcatcagatg ctaaaacctg
 tgacacagag gtacataatg tctggggccc acatgcctgt gtaccacacg accctaacc
 acaagaaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggg
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa
 gttaacccca ctctgtgtta ctctacattg cactaatttg aagaatgcta ctaataccaa
 gagtagtaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaaggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac
 acaggcctgt ccaaaggat ccttgaacc aattcccata cattattgtg cccgggctgg
 ttttgcgatt ctaaagtgtg atgataagaa gttcaatgga tcaggaccat gtacaaatgt
 cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgttaaa
 tggcagtcta gcagaagaag gggtagtaat tagatctgaa aatttcacag acaatgctaa
 aactataata gtacagctga aggaatctgt agaaattaat tgtacaagac ctaacaataa
 tacaagaaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat
 aggagatata agacaagcac atgtaacat tagtggagaa aaatggaata acattttaaa
 acagatagtt acaaaattac aagcacaatt tgggaataaaa acaatagttt ttaagcaatc
 ctcaggaggg gaccagaaa ttgtaatgca cagttttaat tgtggagggg aatttttcta
 ctgtaattca acacagcttt ttaatagtac ttggaataat actatagggc caaataacac
 taatggaaact atcacactcc catgcagaat aaacacaaatt ataacaggt ggcagggaagt
 aggaaaagca atgtatgccc ctcccatcag aggacaaaatt agatgctcat caaatattac
 aggactgcta ttaacaagag atggtggtaa agagatcagt aacaccaccg agatcttcag
 acctggaggt ggagatatga gggacaattg gagaagtga ttatataaat ataaagtagt
 aaaaattgag ccattaggag tagcaccac caaggcaaaag agaagagtgg tgcagagaga
 aaaaagagca gtgacgctag gagctatgtt ccttgggttc ttgggagcag caggaagcac
 tatggggcga cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt
 gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac
 agtctggggc atcaagcagc tccaggcaag agtctgggt gtggaaagat acctaaagga
 tcaacagctc ctagggattt ggggttgctc tggaaaactc atttgacca ctgctgtgcc
 ttggaatgct agttggagta ataaatctct ggatcagatt tggaaataca tgacctggat
 ggagtgggag agagaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc
 gcagaaccaa caagaaaaaga atgaacaaga attattagaa ttggataagt gggcaagttt
 gtggaattgg ttgacatat caaaatggct gtggtatata aaa

2570-1-001N FIGURE 15

2050E0" 50516350

agtgtgt agaaaaattg tgggtcacag tctattatgg
 ggtacctgtg tggaaagaag caaccaccac tctattttgt gcatcagatg ctaaagccta
 tgacacagag gtacataatg tctgggccac acatgcctgt gtaccacag accctaaccc
 acaagaaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggt
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa
 gttaaccca ctctgtgta ctctacattg cactaattg aagaatgcta ctaataccaa
 gagtagtaat tggaaagaga tggacagagg agaaataaaa aattgtctct tcaaggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac
 acaggcctgt ccaaagggtat cctttgaacc aattcccata cattattgtg cccggctgg
 ttttgcgatt ctaaagtgtg atgataagaa gttcaatgga tcaggaccat gtacaaatgt
 cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgttaaa
 tggcagtcta gcagaagaag gggtagtaat tagatctgaa aattcacag acaatgctaa
 aactataata gtacagctga aggaatctgt agaaattaat tgtacaagac ctaacaataa
 tacaagaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat
 aggagatata agacaagcac attgtaacat tagtggagaa aaatggaata acactttaaa
 acagatagtt acaaaattac aagcacaaat tgggaataaaa acaatagtct ttaagcaatc
 ctgaggaggg gaccagaaaa ttgtaatgca cagttttaat tgtggagggg aatttttcta
 ctgtaattca acacagcttt ttaatagtac ttggaataat actatagggc caataaacac
 taatggaact atcacactcc catgcagaat aaacacaaat ataaacaggt ggcaggaagt
 agaaaaagca atgtatgccc ctccatcag aggacaaaat agatgctcat caaatattac
 aggactgcta ttaacaagag atggtggtaa agagatcagt aacaccaccg agatcttcag
 acctggaggt ggagatatga gggacaattg gagaagtga ttaataaat ataaagtagt
 aaaaattgag ccattaggag tagcaccac caaggcaaa agaaagagtgg tgcagagaga
 aaaaagagca tgacgctag gagctatgtt ccttgggttc tgggagcag caggaagcac
 tatgggcgca cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt
 gcaacagcag acaaatltgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac
 agtctggggc atcaagcagc tccaggcaag agtcctggct gtggaaagat acctaaagga
 tcaacagctc ctagggattt ggggttgctc tggaaaactc atttgcacca ctgctgtgcc
 ttggaatgct agttggagta ataaatctct ggatcagatt tggaaataaca tgacctggat
 ggagtgggag agagaaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc
 gcagaaccaa caagaaaaaga atgaacaaga attattagaa ttggataagt gggcaagttt
 gtggaattgg ttgacatat caaaatggct gtggtatata aaa

2570-1-001N FIGURE 16

Amino acid sequence of SF162ΔV2 gp140

MRVKGIRK^{NY}QHLWRGGTLLGLMLICS^AVEKLWVT^VYYG
VPVWKE^ATTTLFCASDAKAYDTEVHN^VWATHACVPTDPNPQ
EIVLE^NVTFNFMWKN^NMVEQM^HEDI^SLWDQSLKPCVKLT
PLCVTLHCTNLK^NATNTKSS^NWKEMDRGEIK^NCSFKV-GAG-
KLINCNTSVITQACPK^VSFEPI^HYCAPAGFAILKCN^DKKFN
GSGPCT^NVSTVQCTHGIRP^VVSTQLLNGSLAEEGV^VIRSEN^F
TDNAKTIIVQLKESVEIN^CTRPN^NNTRK^SITIGPGR^AFYATGDI
IGDIRQAHCNISGEK^WNNTLKQIVTKLQ^AQFGN^KKTIVFKQSS
GGDPEIVMHSFNCGGEFF^YCNSTQLFN^STWN^TIGPNN^TNG
TITLPCR^IKQI^NRWQEVGK^AMYAPP^IRQIRCS^SNITGLLLTR
DGGKEIS^NTTTEIFRPGGDMRD^NWRSELYKYK^VVV^KIEPLGV
APTKAKRR^VVQREKRAVTLGAMFLGLGAAGSTMGARSL
TLTVQARQLLSGIVQQ^QNNLLRAIEAQQHLLQLTVWG^IKLQ
ARVL^AVERYLKDQQLGIWGCSGK^LICTTAVPWN^ASW^SNK
SLDQIW^NNMTWMEWEREID^NYTNLIYTLIE^SQNQQEKNE
QELLELDK^WASLWNWFDISKWLWYIK

2570-1-001N FIGURE 17

Amino acid sequence of SF162AV2 gp140 less 27 amino acid N-terminal sequence

SAVEKLWVTVYYG
VPVWKEATTTLFCASDAKAYDTEVHNVWATHACVTPDPNPQ
EIVLENVTENFNMWKNMVEQMHEDIISLWDQSLKPCVKLT
PLCVTLHCTNLKNA^TN^TTKSSNWKEMDRGEIK^NCSFKV-GAG-
KLINCNTSVITQACPKVSFEPIPIHYCAPAGAILKCNDKKFN
GSGPCTN^VSTVQCTHGIRPVVSTQLLN^GSLAEEGVVIRSENF
TDNAKTIIVQLKESVEIN^CTRPN^NNTRKSITIGPGRAFYATGDI
IGDIRQAH^CNISGEKWN^NTLKQIVTKLQAQFG^NKTIVFKQSS
GGDPEIVMHSFNCGGEFFYC^NSTQLFN^TWN^TNTIGPN^NTNG
TITLPCRIKQI^NRWQEVGKAMYAPP^IRQIRCSS^NITGLLLTR
DGGKEIS^NTEIFRPGGDMRD^NWRSELYKYKVVKIEPLGV
APTKAKRRVVQREKRAVTLGAMFLGFLGAAGSTMGARSL
TLTVQARQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGIKLQ
ARVLAVERYLKDQQLGIWGCSGKLICTTAVPWN^ASW^SN^K
SLDQIWNNMTWMEWEREID^NYTNLIYTLIEESQNQ^QEKNE
QELLELDKWASLWNWFDISKWLWYIK